

Maine Charter School Commission

September, 2016

On April 28 and June 17, 2016, announced on-site visits were made to Baxter Academy for Technology and Science public charter school. The Maine Charter School Commission (MCSC) review team of 3 members was accompanied by the MCSC Executive Director, MCSC Director of Program Management, and Department of Education Special Services team member. The visiting team held interviews with school leadership, staff, students, parents, and the school's Governing Board. They also reviewed data provided by the school. Documents provided by the school are available from the MCSC office. Information gathered from documents, interviews, and on-site observation was used to determine the extent to which the school has met its contracted performance targets.

Commission Member, Review Team Chair	Jana Lapoint
Commission Member	John Bird
Commission Member	Shelley Reed
MCSC Executive Director	Bob Kautz
MCSC Director of Program Management	Gina Post
DOE Special Services team member	Roberta Lucas

The Maine State Charter School Commission will provide thoughtful stewardship in authorizing and monitoring public charter schools consistent with State statutes to create unique, high-quality learning options for Maine students.

Maine Charter School Commission

ANNUAL MONITORING REPORT

September 2016

Section 1: School Overview

School Name	Baxter Academy for Technology and Science (Baxter Academy)
Address	54 York Street Portland, Maine
	561 Congress St, Portland, Maine

Board Chair	Allison Crean Davis
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Executive Director	Kelli Pryor
Head of School	Michele LaForge

Year Opened	School year 2013-2014
Years in Operation	3
Number of Sending Districts	66
Grades Served	9-12
Number of Students	316 (October 1, 2015 "count day")
Teacher – Student Ratio	14:1

Mission	To be a rigorous, college preparatory high school promoting student ownership of learning through curriculum focused specifically on science, technology, engineering, and math.
Vision	To use a technology-rich, project-based learning approach to education at the secondary level.

Section 2: Indicator Summary Table

Indicator	Meets Contract agreement	Partially meets Contract agreement	Does not meet Contract agreement
Student Academic Proficiency	X ¹		
Student Academic Growth ²			
Achievement Gaps in proficiency and growth between major student subgroups ³			
Student Attendance	X		
Recurrent Enrollment from Year to Year	X		
Post-Secondary Readiness	X		
Financial Performance and Sustainability	X		
Governance Board Performance and Stewardship	X		
Adequacy of Facilities Maintenance in Support of Program	X		
Food Service	X		
Transportation	X		
School Social and Academic Climate	X		
Parent and Community Engagement	X		

¹ 63.3% of graduating seniors have taken all three types of courses.

² Student Academic Growth targets are based upon Maine State Testing results, which are not yet available.

³ Baxter Academy set baselines for achievement gaps in the 2015-16 school year.

Section 3: Academics

Targets:

Proficiency

- Percent of students at each grade level scoring proficient on the reading portion of the Maine State Assessment.
- Percent of students at each grade level scoring proficient on the mathematics portion of the Maine State Assessment.
- Percent of students at each grade level scoring proficient on the science portions of any Maine State Assessment given in a particular year.
- Proficiency on school selected standardized test in reading and math.
- 90% or more students will have taken all three types of courses by graduation (Engineering, Design, and Fabrication) beginning with the graduating class of 2018.

Growth

- Growth on State Assessment for Reading
- Growth on State Assessment for Math

Achievement Gaps

- Decrease in reported gaps in proficiency between major student subgroups on State Assessment in Reading.
- Decrease in reported gaps in proficiency in proficiency between major student subgroups on State Assessment in Math.

Performance:

Proficiency

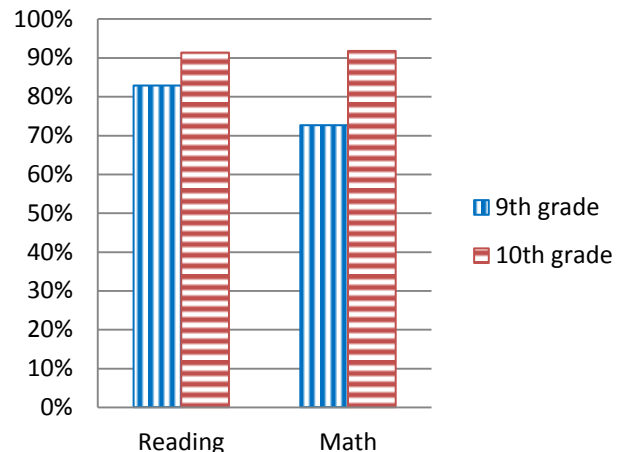
Maine State Assessment results are not yet available.

NWEA testing was conducted in April 2016. Of the 96 freshmen at Baxter Academy, 84 freshmen participated in the NWEA Math test, for a participation rate of 87.5%, and 86 freshmen participated in the NWEA Reading test, for a participation rate of 89.5%. Of the 78 sophomores at Baxter Academy, 72 sophomores participated in the NWEA Math test, for a participation rate of 92%, and 69 sophomores participated in the NWEA Reading test, for a participation rate of 88%.

Students who did not participate had conflicts such as illness, Family vacations, E block early dismissal for sports. E block was the only time for most freshmen when they were not in a core class so this was when Baxter offered the test; however some students always had to leave early at that time. Baxter offered multiple makeup days and sessions, but some students were still unable to finish testing within the two week test window

Math: 72.6% of 9th grade students who participated scored At or Above Grade Level Mean RIT in Math, and 91.7% of 10th grade students who participated scored At or Above Grade Level Mean RIT in Math.

NWEA Percent of Scores At or Above Norm Level Mean RIT



Reading: 82.8% of 9th grade students who participated scored At or Above Grade Level Mean RIT in Reading, and 91.3% of 10th grade students who participated scored At or Above Grade Level Mean RIT in Reading.

There were 78 students in the junior class at Baxter Academy who were eligible to take the SAT. 70 students participated on test day, for a participation rate of 96%. Of the eight students who did not participate three did not take the test: one chose to opt-out, one did not show on test day, and one had a state-approved waiver. The remaining five of the eight students took the test and had delayed scoring because of registration errors or due to illness, injury, or medical excuse. Including the additional five students, the SAT participation rate was 96.1%.

On the Evidence Based Reading and Writing portion of the SAT 80% of Baxter's participants met the College Career Ready Benchmark. On the Math portion 46% met the College Career Ready Benchmark.

The average SAT score for the Evidence Based Reading and Writing portion of the SAT was 560, and for Math the average was 517. State and National results are not yet available for comparison.

Baxter Academy offers classes in engineering, design, and fabrication. Of the 305 students who attended Baxter Academy during the 2015-16 school year:

- 44.9% had taken courses in Design, Fabrication, and Engineering during their tenure at Baxter.
- 38.7% had taken courses in two of these areas.
- 14.1% had taken one course in these areas.
- 97.7% of all students (9th-12th grade) had taken at least one course in engineering, design or fabrication.

63.3% of graduating seniors have taken all three types of courses. With its first two graduating classes (2016 and 2017), the school is in a ramp-up period for having the capacity to meet the requirement that 90% or more of students will take all three types of courses (Engineering, Design, and Fabrication) by graduation beginning with the graduating class of 2018.

Growth

Maine State Assessment results are not yet available.

Achievement Gaps

SAT results for students with an IEP showed 36% met the College and Career Ready Benchmark, as defined and reported by the College Board, for math. 54% met the met the College and Career Ready Benchmark, as defined and reported by the College Board for reading. Other subgroups were not reported by Baxter Academy to the Commission due to small group sizes and protecting student confidentiality.

Section 4: Enrollment and Attendance

Student Enrollment

Targets:

- An attendance rate at least 1% above the state average, with a simultaneous goal of having rates at or above 94%.
- 90% of students enrolled on the last day school indicate intent to return the following school year.
- 90% of students will maintain continuous enrollment for multiple years.

Performance:

Baxter Academy had a 94% attendance rate during the 2015-16 school year. The Maine state average for grades 9-12 for the 2015-16 school year was 93%. Baxter Academy met the target for 94% attendance rate and for having a rate at least 1% higher than the state average.

98% of students enrolled at the end of the 2015-16 school year have re-enrolled for the 2016-17 school year, meeting the 90% re-enrollment target.

Baxter Academy has maintained a continuous enrollment above 90%, with yearly re-enrollment being 94% or higher for three years, and has met the target in this area.

Section 5: Post-Secondary Readiness

- Graduation Rate
- Percent of juniors and seniors attempting dual enrollment courses.

On June 4, 2016, 49 students attended Baxter's very first graduation ceremony, and had a graduation rate of 100%.

2015-16 was the second continuous year of dual enrollment college courses offered to Baxter Academy juniors and seniors. 41% of Baxter Academy seniors (20 students) took at least one college course during the 2015-16 school year and 12% of Baxter Academy juniors (10 students) took at least one college course during the 2015-16 school year.

Preliminary data show the following post-secondary institution acceptance rates. As of June 1, 2016, 87.8% of Baxter Academy's 2016 graduates had been accepted to a post-secondary institution.

For the total number of seniors (49): Post Secondary Status	Number	Percent
Accepted to college	43	88%
Going on to college	41	84%
Attending 2-year institution	8	16%
Attending 4-year institution	33	67%

Section 6: Governance

Governance Board Performance & Stewardship

Targets:

- Board conducts an annual evaluation of school leadership
- Board certifies that the facilities meet educational and health and safety standards, are clean, maintained and efficient regarding costs

Chair of the Board	Allison Crean Davis
Board Member	Patti Oldmixon
Board Member	Peter Montano
Board Member	Peter Morrison
Board Member	Ruth Dean
Board Member	Kim Gustafson
Board Member	Christian Sparling

Performance:

During the 2015-16 school year the Baxter Academy for Technology and Science Governing Board consisted of seven members, having increased from five members by adding two new seats during the year. In filling the new seats, the Board carefully considered candidates who would bring strong development potential, as well as a demonstrated commitment to the school's unique mission.

Baxter Academy transitioned its Board Chair to the position of Executive Director. The Board was able to maintain continuity of leadership with its founding vice chair moving to the position of Board Chair.

During the 2015-16 school year the Board implemented a formal review process for the school leader who reports to the board, and met the target for evaluation of school leadership.

Baxter's Governing Board holds open meetings monthly, usually on the second Tuesday. Agendas and minutes are posted on the website.

The board continues to participate in a process to secure a sustainable permanent home for Baxter that will meet all applicable health, safety and fire code requirements and will be sufficient in size to safely house the school's full enrollment, and meet ADA/ state requirements.

Section 7: Administration

During the 2015-16 school year, Baxter Academy's Executive Director retired. The position was filled with the school's founding Governing Board Chair. The current Executive Director continues work on partnerships, development, transportation, and facilities.

The Head of School continued to work with students and teachers to develop Baxter Academy's educational programs. Baxter Academy's Performance Evaluation and Professional Growth Model (PE PG) plan has been submitted to the Maine Department of Education (MDOE) and is pending approval.

Section 8: School Climate**Targets:**

- Number of behavioral incidents using state and federal reporting requirements.
- Results from annual administration of a climate survey (in-house) representing stable or rising positive perceptions from each stakeholder group concerning school climate and support for learning.

Performance:

During the 2015-16 school year there were 3 reported incidents of bullying/harassment at Baxter Academy. All three incidents were resolved in-house.

Baxter's use of mediation and the student-lead Judiciary Board (J Board) continue to be an integral part of addressing behavioral incidents. Students may opt to use the J Board or work directly with administration to address behavioral incidents and pursue conflict resolution.

During the 2015-16 school year Baxter Academy implemented the Behavior Management function of Infinite Campus. This allowed teachers to submit behavior reports to document student behavior and make connections to academic success and school climate.

An annual confidential survey of parents/guardians, students, and teachers was conducted in April 2016 and assessed 4 different domains:

- Safety (6 questions)
- Teaching and Learning (5 questions)
- Interpersonal Relationships (6 questions)
- Institutional Environment (5 questions)

Response Rates

Respondent	Total Number In School	Total Number Answering Survey	Response Rate
Parent	320	77	24.1%
Student	320	70	21.9%
Teacher (excludes staff)	25	8	32%

For each of the twenty-two questions posed in the survey, respondents could choose from a 6-point scale and where a high percent indicates a more positive response.

SAFETY	
Respondent	Percent
Parents/Guardians	86%
Students	79%
Teachers	92%
Average	86%

TEACHING AND LEARNING	
Respondent	Percent
Parents/Guardians	77%
Students	59%
Teachers	73%
Average	70%

INTERPERSONAL RELATIONSHIPS	
Respondent	Percent
Parents/Guardians	82%
Students	76%
Teachers	83%
Average	80%

INSTITUTIONAL ENVIRONMENT	
Respondent	Percent
Parents/Guardians	63%
Students	46%
Teachers	46%
Average	52%

High marks were achieved in most domains, with the lowest rankings among all three respondent categories throughout the survey in the domain of Institutional Environment. The two lowest ranked questions were:

- Baxter Academy is physically attractive (pleasing architecture, nicely decorated, etc.).
- The Baxter Academy building is kept in good condition.

Survey data was provided to the Governing Board to consider in planning for Baxter Academy's future and was shared with administration, staff and teachers to consider measures needed in all areas of the school's operations.

Baxter Academy also participated in the MCSC sponsored Panorama Education surveys in spring 2016. Results are shown in the tables below.

Family Survey								
% favorable (responses of top 2 choices)								
	Overall	Barriers to Engagement	Family Engagement	Grit	School Climate	School Fit	School Safety	# surveys completed
Baxter Academy	70	83	17	55	85	76	91	124
MCSC Average	69	86	20	50	81	72	91	356

Student Survey								
% favorable (responses of top 2 choices)								
	Overall	Grit	School Climate	School Engagement	School Rigorous Expectations	School Safety	School teacher-student relationships	# surveys completed
Baxter Academy	66	61	60	45	71	84	71	153
MCSC Average Grades 6-12	66	60	67	39	71	85	73	625

Staff Survey									
% favorable (responses of top 2 choices)									
	Overall	Feedback and Coaching	Grit	Professional Learning	School Climate	School Leadership	Staff-Family Relationships	Staff-Leadership Relationships	# surveys completed
Baxter Academy	68	32	57	61	78	64	68	94	20
MCSC Average	65	35	40	56	74	67	68	87	102

The majority of responses across all scales and all three populations surveyed were positive. All three Baxter Academy populations surveyed responded positively as often as, or more than, the MCSC average.

The family survey was 70% favorable overall, 1% higher than the MCSC average. The highest scoring scale among families was School Safety (91% favorable), and the lowest was Family Engagement (17%). Baxter Academy's draws its student from a very large geographical area and uses technology to its advantage for connecting with families. Questions on this survey were directed toward face-to-face contact, not contact via

phone, video conference, or email. As explained by parents at the MCSC review team's on-site interview, families have many opportunities to connect and stay involved by using technology in addition to in-person contact.

The student survey was 66% favorable overall, the same as the MCSC average. The highest scoring scale among students was School Safety (84% favorable). The lowest scoring scale was School Engagement (45% favorable), which was consistent with the MCSC average.

The staff survey was 68% positive overall and was 3% higher than the MCSC average. The highest scoring scale among staff was Staff-Leadership Relationships (94% favorable), and the lowest scoring scale was Feedback and Coaching (32% favorable). Baxter Academy has submitted its Performance Evaluation and Professional Growth Model (PE PG) plan to the Maine Department of Education and is pending approval. Upon approval and implementation of this model, Baxter Academy will likely see increased scores on the Feedback and Coaching scale on future surveys.

Definitions:

Barriers to Engagement - Factors that can create challenges for families to interact with or become involved with their child's school

Family Engagement - The degree to which families become involved with and interact with their child's school

Feedback and Coaching - Perceptions of the amount and quality of feedback faculty and staff receive

Grit - How well students are able to persevere through setbacks to achieve important long-term goals

Professional Learning - Perceptions of the amount and quality of professional growth and learning opportunities available to faculty and staff

School Climate - Perceptions of the overall social and learning climate of the school

School Engagement - How attentive and invested students are in school

School Fit - Families' perceptions of how well a school matches their child's developmental needs

School Leadership - Perceptions of the school leadership's effectiveness

School Rigorous Expectations - How much students feel that their teachers hold them to high expectations around effort, understanding, persistence, and performance in class

School Safety - Perceptions of student physical and psychological safety at school

School Teacher-Student Relationships - How strong the social connection is between teachers and students within and beyond the school

Staff-Family Relationships - Perceptions of faculty and staff relationships with the families at their school.

Staff-Leadership Relationships - Perceptions of faculty and staff relationships with school leaders

Section 9: Parent and Community Engagement

Targets:

- Frequency of communications
- Number of Parent advisory meetings
- Percent of families contributing to the annual appeal
- Participation in student-led conferences
- Portfolio of corporate, community, and/or academic partners showing growth in the depth of partner engagement and/or breadth of partners

Performance:

Communication with parents occurs weekly, and multiple time per month. Email is the most frequently used form of communication, followed by mail and web-postings. Anecdotal feedback from parents indicates that email communication is sufficient to provide information.

The school is developing a new system for communications among parents on initiatives undertaken for the school. The system will use the new parents' site on the website as a billboard and will also create an email tree system based on the school's advisory system. This will also be used as a volunteer coordination system.

Baxter Academy's Parent advisory board members meet with the head of school each trimester, and as a group, as needed.

During the 2015-16 school year Baxter Academy had 95% participation in Student Lead Conferences (SLC).

Baxter Academy reports an estimated 50 business, public, nonprofit, and individual community and academic partners working with students, faculty, and staff. Partners serve as mentors and project sponsors and offer internships. They work with Baxter to provide early-college options. Courses are open at Maine College of Art (MECA) with a special Baxter scholarship and the University of Southern Maine offers a Calculus-based Physics class taught by Baxter's physics teacher at Baxter. The University of Southern Maine's Extended Teacher Education Program (ETEP) trains teachers in Baxter's classrooms.

Baxter Academy's receipt of a federal charter school grant of \$250,000 awarded in April, 2016 will help support expansion of these partnerships and will include the following activities:

- Developing Flex Friday teacher and student handbooks to extend the ways in which the curriculum can be used at Baxter, and beyond
- Addressing gender inequalities in STEM through middle-school outreach, mentorship, awareness campaign, and a student-produced documentary film about women in STEM.
- Expanding and creating opportunity around anytime, anywhere learning, including facilitating connections and organizations working with Baxter students.
- Designing and implementing a project-based program for ELL students, including new community partnerships to accomplish this initiative.

Section 10: Finances

Financial Performance and Sustainability

Targets:

- Quarterly financial reports and end-of-year audit are available to authorizer.

Performance:

During the 2015-16 school year, ending June 30, 2016, Baxter Academy had a positive net income of \$61,731. The school did not use its line of credit during the 2015-16 school year.

Baxter Academy has received notice of award for a federal grant for \$250,000 that will help support expansion of community partnerships.

An annual financial audit was completed for FY 2015, and was submitted to the MCSC and the Department of Education. It was determined there were no findings or other matters about which the auditor had concerns.

Section 11: Facilities & Maintenance, Food Service, and Transportation

Adequacy of Facilities Maintenance in Support of Program

Targets:

- School facilities meet educational and health and safety standards

Performance:

Baxter Academy used 100% of its classroom space during the 2015-16 school year. For the 2016-17 school year the school will add two additional classrooms at the 561 Congress Street facility. At the 54 York Street facility, two oversized rooms will be divided into two classrooms to provide additional classroom space.

For the 2016-17 school year, Baxter Academy will change its building cleaning arrangement from a contracted service to two half-time custodians who will be responsible for the cleaning and maintenance of our school building.

The school's Governing Board continues to provide guidance and oversight for long-term facilities solutions. Baxter Academy's Climate Survey revealed low scores in student perception of the current facilities.

Food Service

Targets:

- Record of costs and student utilization

Performance

Food service expenditures were in line with Baxter Academy's budgeting for the year, and were higher this year due to the increased student enrollment and student participation.

Baxter Academy does not have kitchen facilities; however, it offers a unique meal program to students. The lunch program encompasses a partnership with five local restaurants (b.good, Zen Chinese Bistro,

Kamasouptra, Portland Pie, and Subway) who offer a wide variety of healthy and fresh lunch options, daily, at a fee of \$5/meal. Students eligible for federal Free and Reduced Meals are provided with meals at a free or reduced rate. Students who do not use Baxter Academy’s lunch program bring their own lunch or find other local options.

5,138 lunches provided between 9/1/15-5/19/16

- 31% of student body participates in off-site vendor provided lunch program.
- 3070 (59.7%) lunches provided to F/RE students.
- Cost for free lunches = \$16,910 (Paid for by Baxter Academy)
- Cost for reduced lunches = \$1,224 (Paid for by Baxter Academy)
- Cost for all other students is \$5/meal.

Baxter Academy does not provide breakfast at this time; however, a Flex Friday project is serving light breakfast items three days per week as a fundraising endeavor.

Transportation

Providing transportation has been a logistical challenge for Baxter Academy, which serves a large geographic area (4,500 sq miles). Students travel to Baxter using multiple means of transportation, including school provided busing. Bus routes change based on where our students reside and to meet their transportation needs. Baxter has a contract with Luce Transportation to run three bus routes.

Students from the south use the Zoom shuttle-bus (traveling between Biddeford, Saco and Portland). The remaining students either utilize public transportation in-town Portland, walk, or drive/carpool to Baxter.

During the 2015-16 school year bus utilization for the morning was 23% and was 30% for the afternoon. Baxter Academy did not receive any complaints regarding transportation.

Section 12: Evidence of Mission and Vision Implementation

Mission
To be a rigorous, college preparatory high school promoting student ownership or learning through curriculum focused specifically on science, technology, engineering, and math.
Vision
To use a technology-rich, project-based learning approach to education at the secondary level.

Baxter Academy students study complex, real-world problems both in classroom work and through the school’s unique Flex Friday program. This year, Baxter Academy students are building a FIRST⁴ robot with an innovative transmission, designing a program to teach European history through Minecraft, traveling to Africa to teach sustainable farming practices to small-scale farmers, training as magicians to work with terminally ill children, and reimagining American high schools. They are teaming up with Pika Energy to bring an innovative wind turbine to the residential market. They are making documentaries for partners such as Leadership Maine, Maine Medical Center, and Wells Reserve. They are working in biomedical research labs at Maine Medical Center Research Institute, graphically designing brochures, advertisements, and media pieces to promote Baxter, and building a new, smarter website for Baxter Academy.

⁴ FIRST Robotics is a major robotics competition founded by Dean Kamen

Section 12: Commendations and Recommendations

Commendations:

- Baxter Academy met its targets in several areas: attendance, enrollment, reenrollment, post-secondary readiness, college acceptance, financial performance and sustainability, governance, facilities, food service, climate, and engagement.
- The School clarified its leadership structure with the Head of School and Executive Director.
- The governing board made strides with both their organization and demonstrated a seamless continuity of leadership with the board vice chair becoming the chair when the chair moved into the position of executive director.
- The school continues to have strong Community outreach.
- The school is commended on taking care of students' needs for transition to college
- The school was awarded a substantial federal grant.
- Flex Friday continues to be strong by fulfilling the schools educational requirements.
- The school is commended on its continued work by improving transportation opportunities for students.
- During the 2015-2016 school year, 257 out of 325 (79%) Baxter students participated in 2 or more days of snow-day learning that was connected to content standards and/or guiding principles allowing them to continue their anytime/anywhere learning.
- Good cooperation and participation of on-line classes through USM, SMCC and Fort Kent.
- Strong participation and development of student led conferences with teachers, students and parents.
- Financials changes especially since the school not having to use its line of credit for the year.
- Observably high level of openness, communication, and respect between all grade levels of students.

Recommendations:

- The school should continue working to secure a permanent location for the school in one facility.
- The school should continue to grow fund raising capacity.
- The school should be sure the teacher evaluation process is followed through.
- The school should continue to build the school's positive culture with each incoming freshman class.
- The school should continue to expand board membership with a variety of backgrounds
- The school should continue to reach out in the community to find more opportunities for students to participate in research and learning and internships.
- The school should work toward achieving stronger participation in surveys.
- The school should make NWEA completion a priority and should look for higher student participation during the two-week test window.